

E. A. Chapin on the 'Food Habits of the Vireos.'—This report¹ by E. A. Chapin formerly of the Biological Survey, is a most painstaking investigation and amply confirms the universal opinion that the Vireos are among our most valuable birds. Their food consists largely of caterpillars, while scale insects, leaf hoppers, borers and weevils appear regularly on their bill of fare. The only portion of their food that may be regarded as beneficial is the Lady-bird element, but the Vireos themselves destroy the same injurious insects as do these beetles, so that the claim against them is not serious. A small proportion of vegetable food is eaten in the autumn but it consists almost entirely of wild fruit and is negligible.

As an illustration of the thoroughness of these investigations by the Biological Survey it is interesting to learn that 1951 stomachs formed the basis of this study of which 653 were of the Red-eyed Vireo, while upwards of 600 species of insects were detected among the food and portions of seeds, etc., of fifty plants. Needless to say the economic ornithologist must needs be a skilful entomologist and an adept in the use of the microscope. It requires a table fifteen pages long, printed in fine type, to set forth the detailed contents of the Vireo stomachs, while the paper is illustrated by a number of charts showing the relative proportions of different kinds of food in the several species and a full page pen drawing of the Red-eyed Vireo by R. J. Sim.—W. S.

Recent Papers by Chapman.—In the final, tenth, paper,² recording the results of his studies of Ecuadorean birds received by the American Museum of Natural History, Dr. Chapman describes new forms of the genera *Pionus*, *Cyanolesbia*, *Thripadectes*, *Campylorhamphus*, *Ramphotrigon*, *Euchlornis*, *Progne* and *Tachyphonus*. The small Martin, *Progne murphyi* is a very interesting form intermediate between the North and South American species, while the Hummingbird, *Cyanolesbia*, is a very striking new race.

Another paper is based³ on a collection made by Mr. G. H. H. Tate in northeastern Venezuela, mainly on Mt. Turumiquire, and recently acquired by the American Museum. A list of the subtropical species is presented by Dr. Chapman including descriptions of new forms of the genera *Veniliornis*, *Premnoplex*, *Euchlornis*, *Diglossa* and *Hemispingus*. His conclusions as to the avifauna of this eastern Venezuelan mountain district are that there are no Temperate Zone birds there, but between thirty and forty Subtropical Zone species, several of which descend to

¹ Food Habits of the Vireos, A Family of Insectivorous Birds. By Edward A. Chapin. U. S. Department of Agriculture, Department Bulletin No. 1355. November, 1925. pp. 1-44. Price at Government Printing Office, Washington, D. C. 10 cents.

² Descriptions of New Birds from Ecuador and Peru. By Frank M. Chapman. American Museum Novitates, No. 187. September 28, 1925. pp. 1-9.

³ Remarks on the Life Zones of Northeastern Venezuela with Descriptions of New Species of Birds. By Frank M. Chapman. Ibid. No. 191. October 24, 1925. pp. 1-15.